

ABSTRACT OF THE DISCLOSURE

Methods for producing micromachined layered devices comprising a membrane layer and a first and second layer on both sides of the membrane layer are disclosed, the method comprising:

- a) applying a membrane layer to a substrate;
- b) opening a window in the substrate so as to enable the addition of layers from both sides of the membrane layer while the substrate is made into a frame that supports the membrane layer during processing;
- c) adding at least one layer on each side of the membrane either simultaneously or on one side at a time; and
- d) removing the device from the substrate frame.